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PANEL #2:
COMPLIANCE ASSISTANCE/OUTCOME-PERFORMANCE MEASUREMENT

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Northeast State's Pollution Prevention and Compliance Assistance Measurement Project

Jennifer Griffith
Northeast Waste Management Officials' Association
(NEWMOA)

Northeast State's Pollution Prevention & Compliance Assistance Measurement Project

Jennifer Griffith
Northeast Waste Management Officials' Association

Notes

Northeast Waste Management Officials' Association (NEWMOA)

- Non-profit, non-partisan interstate organization established in 1986
- New England, NJ, & NY
- Governed by the HW, SW, Waste Site Cleanup, & P2 Program Directors
- Facilitates communication & cooperation
- Develops unified positions on waste & P2
- Organizes training & conducts research

Notes

- *NEWMOA is a nonprofit, nonpartisan, interstate organization that is officially recognized by EPA. It is governed by hazardous material, solid waste, waste site cleanup, and pollution prevention directors from each of the member states.*

Project Overview

- Project Goal: To Measure P2 & CA Program Activities and Their Results
- Why?
  - Communicate Activities & Accomplishments to Policy-Makers
  - Improve Program Management
  - Provide Funders with Relevant Information
  - Measure Progress Toward Goals

Notes

- *This project is trying to look at overall programs, not individual projects or sectors, in order to develop mechanisms for the development of pollution prevention (P2) performance measures and to evaluate their results.*
- *If this is accomplished, a central repository of data will have been created in each state so trends can be evaluated and states will have access to data that can be manipulated for analysis electronically.*
- *The Northeast Pollution Prevention Roundtable has been in existence since 1989.*

Project Background

- P2 Progress in the Northeast – August 1998
  - 16 State & Local Agencies
  - Analyzed Data from 1990-1996
- Present a Regional Picture - States Did Not Want to Be Compared to Each Other
- Programs Had a Significant Positive Impact on Businesses
- Data Not Consistent Across Programs
- Need to Develop Consistency

Notes

- *In 1998, NEWMOA got a grant to do a report on pollution prevention in the Northeast states based on data from 1990-1996.*
- *The report looked at the regional picture, but did not compare states to one another because each state has different authorities, mandates, levels of staffing, and funding.*
- *Report showed that programs had a significant impact, but the data was not consistent. For example, some states define a site-visit differently.*
- *Tried to develop universal definitions, and a workgroup developed a metrics menu.*

Project Tasks

- Software Development – Microsoft Access
  - Large Workgroup – Multi-state/agency
  - Version 1.0 & Users' Manual - March 2002
  - Version 2.0 and Users' Manual - March 2003
- Implementation Assistance
  - Listserve Established – P2Metrics
  - NPPR ½ Day Training – Spring 2002 and 2003
  - Users Manual and Data Dictionary
  - State Trainings – Summer 2002

Notes

- *States felt they needed a common way to collect data, so NEWMOA developed a program in Microsoft Access that sits on each state's server. Each state manages the system separately as they are very concerned with being compared to one another.*
- *NEWMOA has recently revised Version 2 in accordance with the states' feedback at hands-on training sessions.*
- *To date, they have established a listserve, have done training, and developed a users manual and data dictionary for this software.*

Notes

- *This is the Main Menu page that the database opens to.*
- *Here is where you would choose the type of activity for which you want to enter data.*

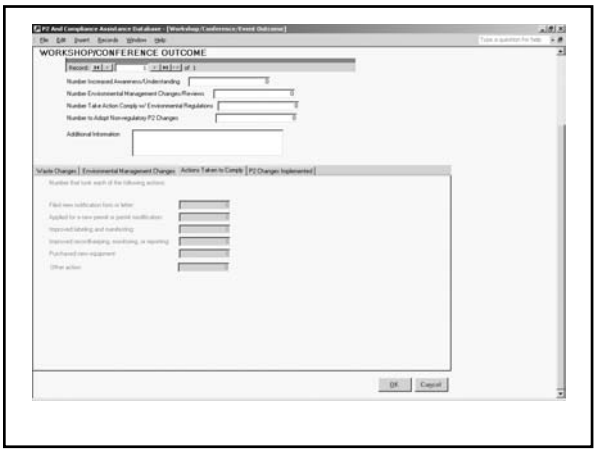
Notes

- *Here is the input form for the Workshops/Conference Activity track.*
- *Here you would enter the lead person, funding source, subprogram initiative, nature of the presentation, event name, type, and details, topic (P2, EMS, compliance/enforcement, etc.), target audience, and NAICS code.*

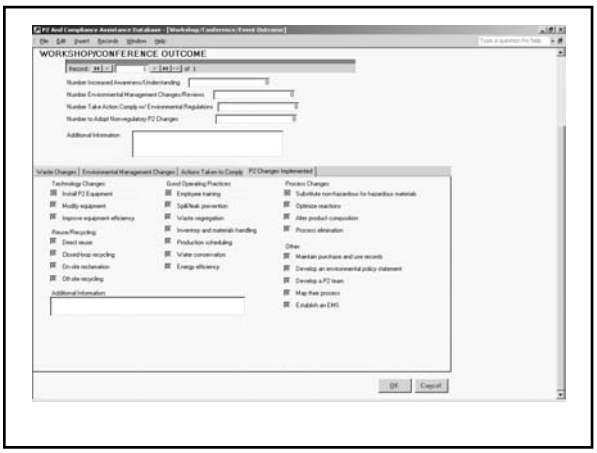
Notes

- *This is the outcome form for the Workshop/Conference Track.*
- *There is lot of detail on this workshop outcomes page.*
- *You can input all possible outcomes here, such as environmental management changes, actions to comply, and P2 changes.*

Notes



Notes



Notes

Lessons Learned

- Cannot satisfy all needs with one system
- Adoption and implementation take longer than anticipated
  - Measurement is not free– need to budget time & funds to gather and input data & maintain system
  - States have less Access capability than Workgroup indicated – many cannot develop output reports
  - Without report capability – less likely to use

Notes

- *One system can't satisfy all needs. For example, this database can't track project management and grant management.*
- *The workshop did not focus on adding an enforcement/inspection piece - they have their own system.*
- *Different versions of Access in different states created problems. NESCAUM had to develop the same database in 3 versions of Access.*
- *States also have less Access capabilities than NEWMOA thought. Each state can't develop their own output reports, which was originally thought to be the states' responsibility.*

Outcomes

- Software Can Be Implemented by Others
  - 3 states outside NEWMOA-region piloting
- Significant National Interest in Software
  - Presentations
    - EPA Region 9
    - Compliance Assistance Advisory Committee
    - Small Business Assistance Program Conference
  - Hands-on trainings:
    - EPA Region 7
    - National Pollution Prevention Roundtable

Notes

- *This software is being used by others outside the NEWMOA region, and there has been national interest in the software, especially at the pollution prevention roundtables.*
- *NEWMOA is now doing presentations and hands-on training.*

Next Steps

- Small Grant from OPPTS to Develop Output Reports – 1 each track - aggregate data only
- Seeking Funding to Continue Implementation Assistance
  - Help states obtain outcome data efficiently (such as develop model follow-up surveys)
  - Develop more output reports
  - Continue involvement in national discussions
  - Improve database functionality – incorporate desired upgrades

Notes

- *Funding from OECA is completed. They also have a small grant from EPA/OPPT to develop output reports at aggregated levels, but only enough to develop a few.*
- *States now need assistance obtaining outcome data efficiently without expending a lot of resources.*
- *The fact that states don't have reporting capabilities means they are less likely to use the program.*
- *The database and user manual is available from NEWMOA.*

For More Information

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Questions and Answers

- *Q: If you've already redone this in various versions of Access, you may not be far from putting this on the web.*
- *A: We still want to keep the states' facility information separate from one another and not public.*
- *Q: Do you know the percentage of output data vs. outcome data?*
- *A: NEWMOA isn't tracking that, we're just developing the tool. Partly, it's used to justify P2 program funding. Some states are using the system, but as many state P2 program budgets have recently been cut, they are doing less and less, and that's a real issue.*

Compliance Assistance Outcome Measurements
Class V UIC Wells

Maura Hanning
New Mexico Environment Department

Compliance Assistance Outcome Measurements: Class V UIC Wells

Maura Hanning, Program Manager, New Mexico Environment Department

Project Overview

The New Mexico Environment Department (NMED) was awarded an EPA OECA STAG in August, 2001 to perform compliance assistance and to implement outcome measurements for large capacity septic systems which are classified as Class V wells under the Safe Drinking Water Act (SDWA) Underground Injection Control (UIC) program. NMED implements the UIC program in accordance with an EPA primacy agreement and the NM Water Quality Act. Under the UIC program, a ground water quality protection permit is required for each Class V septic system. At the start of this project, there were approximately 130 permitted Class V septic systems, approximately 58% of which were out of compliance with respect to operational, monitoring or ground water standards requirements in their permits. The goals of the project are to implement various compliance assistance approaches for Class V septic systems and to measure the outcomes of those actions.

Outcome Measures - Outreach Materials and Targeted Compliance Assistance

Of the compliance assistance approaches implemented thus far in the grant project, NMED assessed performance outcomes for use of outreach materials and for performing targeted compliance assistance. NMED completed a brochure entitled *How to Sample a Monitoring Well* which is intended to address the permit violation of failing to sample ground water monitoring wells. A qualitative survey of staff who have used this brochure during compliance assistance indicates that permit holders are using the brochure and that its use is improving the compliance rate for this violation type. NMED also tracked results of compliance assistance activities such as conducting inspections, making phone calls, and sending compliance letters for 31 sites over an 11 month period. Despite tracking a smaller population of sites, the data collected does support the premise that compliance assistance actions are successful in bringing sites into compliance. Compliance assistance actions resulted in 15 of 28 sites returning to substantial compliance and 5 sites to partial compliance. In addition, 11 of 15 occurrences of taking a single compliance assistance action resulted in gaining substantial compliance, suggesting that a single action has a good chance of resolving compliance problems. Sending notification in writing, such as letters of non-compliance and discharge permit required letters, may be a more effective means of gaining compliance than phone calls and inspections.

Ongoing Challenges to Collecting Meaningful Performance Measure Outcomes

One challenge that NMED is temporarily facing during this grant project is the transition to a new agency-wide database. While the new database will ultimately improve NMED's ability to track performance measures, we are still entering site data and identifying database bugs which hinder our ability to perform meaningful database queries. Another obstacle is trying to track a constantly changing compliance rate. For example, as more sites come into compliance with monitoring and reporting requirements, we expect that the number of sites reporting ground

water standards violations will increase. Some sites are brought into compliance one quarter and then fall back out the following quarter. Some sites go out of compliance, back in compliance, and back out of compliance all in a single reporting quarter. It is this constantly changing compliance rate that seems to present the greatest challenge to measuring the impact of our activities because it requires that one be able to track the specific outcome for a specific action at a specific site. The action-specific performance measures we are tracking for this grant project require a lot of manual counting and evaluation that will not be realistic to apply when measuring compliance assistance outcomes for the 850 ground water quality protection permits NMED issues and oversees. Our next challenge is to develop performance measures for compliance assistance using data that can be readily entered and retrieved from the new NMED database.

Compliance Assistance Outcome Measurements Class V UIC Wells

Maura Hanning
Ground Water Quality Bureau,
New Mexico Environment Department

Notes

Ground Water Quality Protection Program in NM

- Mission: To protect the quality of New Mexico's ground water resources for present and future use.
- Authority: NM Water Quality Act and Water Quality Control Commission Regulations.
- Program Implementation: Issue and oversee 850 ground water quality protection permits for facilities whose discharges of wastewater have the potential to impact ground water quality (domestic, agricultural, industrial, mining).

Notes

- *This work falls under state statute, New Mexico Water Quality Act and Water Quality Control Commission Regulations.*
- *This Ground Water Protection group has a staff of 19 people responsible for all 850 ground water protection permits.*
- *Her program has typically done very little compliance and enforcement, so they are very grateful for their STAG.*

Ground Water Quality Protection Program in NM

- Importance:
  - 90% of New Mexico's population relies on ground water as a drinking water source.
  - Ground water comprises nearly half of the total water annually withdrawn for all uses in NM, including agricultural and industrial uses.

Notes

- *Groundwater is an essential resource in New Mexico*

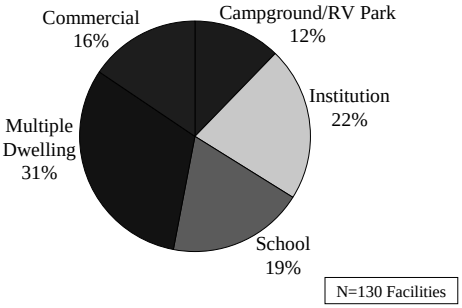
Federal Regulations for Ground Water Quality Protection

- US Safe Drinking Water Act and CFR protect drinking water aquifers from contamination by underground injection control (UIC) wells.
- NM has primacy for the UIC program.
- Permit 300 Class V UIC wells, of which 130 are Class V septic systems (>2,000 gpd).

Notes

- *They do not have a direct federal counterpart for ground water protection.*

Sites Using Class V Septic Systems



Notes

- *Well over 31% of the sites using Class V septic systems are very tough to deal with: mobile homes, schools, and institutions like senior health care centers. They don't feel they really have the option to shut them down.*

Why Class V Septic Systems Are a Compliance Concern

- 58% non-compliant with permit, 60+ unpermitted.
- Often poorly constructed and maintained.
- Operators have limited knowledge and resources.
- Effluent poses a threat to human health and ground water quality.
- Often serve multiple dwellings with residents who live below the poverty level: hesitant to complain.
- In areas served by private drinking water wells.

Notes

- *Why Class V systems? People don't pay much attention to septic systems - they just don't really want to think about them.*
- *Regulated nitrogen limit is 10 ppm - but studies have shown that levels lower than that have been linked to some types of cancer.*
- *In addition, many times the people with out-of-compliance USTs are those that are using private drinking water wells which have no testing requirements set by regulations.*

Surfacing Sewage, Mobile Home Park
Source: NMED files

Notes

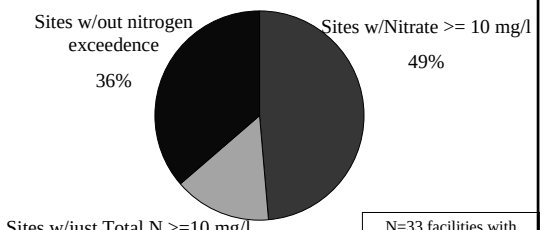
Trash Can Lift Station, Mobile Home Park
Source: NMED files

Notes

Effluent Pit, Spa Resort
Source: NMED files

Notes

Ground Water Contamination at Class V Septic Systems



Notes

- *Regarding groundwater contamination: Out of 130 sites, our data only represents 33 sites, and over 50% of these exceed the nitrate standard.*
- *The baseline was determined in 1999.*

Goals of Grant

- Develop guidelines and general permit
- Develop outreach materials
- Identify un-permitted sites
- Perform targeted assistance
- Measure compliance assistance

Notes

- *They are using an approach similar to what they used for dairies, but it's not directly applicable.*

Outcome Measurements Use of Outreach Materials

- Goal: create and implement outreach materials for Class V septic systems.
- Outcome: staff indicate a qualitative improvement in compliance from permittees who are recipients of outreach materials.

Notes

- *We are trying to teach the importance of sampling, how to fill out the permit application, etc. with our outreach materials.*

Outcome Measurements Targeted Compliance Assistance

- Goal: perform compliance assistance activities at Class V septic systems:
  - Site visits and inspections;
  - Outreach materials;
  - Telephone calls; and,
  - Compliance letters.

Notes

Septic Tank Sampling
Source: NMED files

Notes

Outcome Measurements Targeted Compliance Assistance

- Outcome: 1 staff person performed compliance assistance at 31 sites over an 11 month period:
  - 15 sites returned to substantial compliance;
  - 5 sites returned to partial compliance;
  - 11 out of 15 instances of taking a single action resulted in substantial compliance; and,
  - Written compliance letters are more effective than phone calls and inspections.

Notes

- *For them, compliance is a progressive disciplinary approach. They start with a NOV and would ratchet up from there.*
- *Usually a single enforcement will result in substantial compliance for this population.*
- *Outcomes: Out of 31 sites visited, many came back into compliance to one extent or another.*

Challenges to Collecting Outcome Measures

- Transition to agency-wide database.
- Constantly changing compliance rate.
- Action-specific performance measures must be tracked manually – very time consuming.
- Trade-off between staff data-entry time vs. ability to measure performance.

Notes

- *Moving to TEMPO-type database (they call it IDEA). Trying to collect measures now while they migrate over.*
- *It's challenging to measure compliance rates in a constantly shifting situation. Facilities come in, and go out of, compliance all the time*
- *It takes a lot of staff time to enter data.*
- *Getting the staffs' input is essential in overcoming these challenges.*

Overcoming Challenges to Collecting Outcome Measures

- Hold bureau meetings to determine:
  - measures that staff and management value;
  - measures that are easily retrievable from new database; and,
  - measures that balance data entry time with the value of the measure.

Notes

Sharing the Results

- Use of well-designed outreach materials improves compliance rates.
- A single compliance action typically results in compliance improvements – refer unresponsive regulated entities for formal enforcement.
- Written compliance actions can be more effective in obtaining compliance than phone calls and site inspections.

Notes

- *Well-designed outreach materials seem to have worked. People are filling out sample purge volume information and sending it in, for example.*
- *Normally, a single compliance action results in improvement.*
- *Letters worked better than phone calls or visits for this population of permittees.*
- *If you don't get a response to your first contact, it's probably time to do formal enforcement because additional letters or phone calls probably won't work*

Questions and Answers

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Questions and Answers

- *Q: You said that action-specific compliance must be measured manually. Why is this?*
- *A: I am looking at a NOV for monitoring personally and subjectively to determine whether it was that action that was successful at changing the permittee's monitoring and reporting behavior. It's not that simple. You have to see when the monitoring was done and when the reporting was received to trace cause and effect. Reproducibility may be tough. But this is how our database is set up. It doesn't connect action with a specific result. That's just an awful lot of data entry.*

An Evaluation of Work Product and Program Effectiveness of the "Michigan Manufacturers' Guide to Environmental Safety and Health" and the Michigan (Small Business) Clean Air Assistance Program

Donna Davis
Michigan Department of Environmental Quality

An Evaluation of Work Product and Program Effectiveness
of the
"Michigan Manufacturers' Guide to Environmental, Safety and Health"
and the
Michigan (Small Business) Clean Air Assistance Program

In July of 2000, the (Small Business) Clean Air Assistance Program (CAAP), Environmental Science and Services Division of the Michigan Department of Environmental Quality received a multi-media State and Tribal Assistance Grant (STAG) from EPA's Office of Compliance and Enforcement Assurance (OECA) in the amount of $40,000. The grant project, entitled "**Business Needs Assessment and Measure of Work Product Effectiveness,"** is to gauge the usefulness of a CAAP work product, the "Michigan Manufacturers' Guide to Environmental, Safety and Health." Grant activities are also expected to measure limited aspects of CAAP by examining the effectiveness of their outreach efforts as a technical assistance resource for the state's business and industry. Additional aspects of the grant will provide ways in which the CAAP can improve its methods of outreach in order to better serve a greater proportion of its customer base.

Donna Davis, MI DEQ

An Evaluation of Work Product and Program Effectiveness of the Michigan Manufacturers Guide to Environmental, Safety and Health and the Michigan (Small Business) Clean Air Assistance Program

GRANT OVERVIEW

Background

In July of 2000, the (Small Business) Clean Air Assistance Program (CAAP), Environmental Science and Services Division (ESSD - formerly the Environmental Assistance Division or EAD) of the Michigan Department of Environmental Quality received a multi-media State and Tribal Assistance Grant (STAG) from EPA's Office of Compliance and Enforcement Assurance (OECA) in the amount of $40,000. The grant project, entitled Business Needs Assessment and Measure of Work Product Effectiveness, is to gauge the usefulness of a CAAP work product, the Michigan Manufacturers Guide to Environmental, Safety and Health Grant activities will also measure limited aspects of the CAAP by examining the effectiveness of their outreach efforts as a technical assistance resource for the state's business and industry. Additional aspects of the grant will provide ways in which the CAAP can improve its methods of outreach in order to better serve a greater proportion of its customer base.

A Lansing, Michigan area consulting firm, Public Policy Associates, Inc. (PPA), is performing the work product assessment by administering a series of two surveys and two focus group sessions. The first survey was administered to 1,800 program customers who received a copy of the environmental, safety and health guide. The second survey was delivered to a random pool of 3,000 statewide non-customers to determine what needs still exist within the environmental community, and how the program can best meet those needs in the future. Both customer and non-customer surveys were accompanied by a letter from the former Department Director, encouraging the participant to fill out and return the surveys.

Activities to Date

The two focus group forums were held on September 17 and 19, 2002 in Grand Rapids, Michigan and Farmington Hills, Michigan, respectively. A focus group report was generated by PPA in October 2002 generally summarizing the outcomes of the focus group participants.

The Guide's customer survey was administered in December of 2002 and the non-customer survey was administered in early January 2003. Between January and March of 2003, PPA

aggregated the data from the customer survey and generated a customer satisfaction report of summary findings. Where appropriate and relevant, PPA attempted to integrate the findings of the two focus groups with the findings of the customer survey.

Data from the non-customer surveys is currently being aggregated, and it is expected that a summary report of findings will be presented sometime in the spring of 2003. The non-customer report is expected to provide the Clean Air Assistance Program, its home division

(ESSD, formerly EAD), and the MDEQ with information that can be used to retool the program's compliance assistance work products and activities.

FOCUS GROUP RESEARCH

Demographics of Participants

(Farmington Hills, Michigan)
- One from a local government entity.
- One from a plastic injection molding company.
- One from a medical diagnostic equipment company.
- One from a stainless steel foundry who does casting for mining industry.
- Two environmental consultants.
- One from a welding and robotic systems company.
- Two from transportation equipment companies.
- One caster and wheel lock manufacturer.

(Grand Rapids, Michigan)
- One powder coating furniture company.
- Two furniture manufacturers.
- One preconstruction company.
- One injection molding company for the transportation and furniture industry.
- One painting and coating company.

Summary of Research Findings

The focus group participants represented a wide range of expertise, experience, and responsibility for environmental and safety compliance within their organizations. Each of them brought a different set of experiences with and perspective toward the MDEQ and EAD. With all of these differences, there were still some common themes that emerged from the two focus

groups.

Considered together, those themes suggest the following conclusions:

- The Guide is serving its intended purpose as a reference for understanding environmental, safety and health regulations. It appears to compete strongly with other commercially prepared references and resources such as the JJ Keller subscription service.

- The current bound format of the Guide is not the format that users prefer, although there was no consensus on what a preferred format would be. The older notebook form and electronic versions on CD-ROM were mentioned as alternatives. Participants also thought that the current format was difficult to navigate.
- Participants were looking to the MDEQ to provide more assistance on how to comply with environmental regulations. They suggested that sample programs, forms and policies, and an environmental-audit checklist be included in the Guide. In addition to changes to the Guide, they also wanted to see compliance workshops and on-site audits offered to business and industry without the threat of enforcement. However, participants, while seeking help in how to comply with environmental laws, were reluctant to pay for these on-site audits.
- The Guide is considered a bargain, and paying for updates to the Guide was also not an issue.
- The Facility Assessment Survey is a useful tool for helping people utilize the Guide.
- Most participants felt the Regulations101 workshop was very helpful. The speakers were appreciated and were said to have provided useful information. Several customers indicated they would be interested in additional workshops.
- The recent changes to the MDEQ web site made it more difficult for customers to navigate within the site. Customers were especially interested in direct and current links to information and the establishment of a document clearinghouse.
- People were aware of the services provided by EAD and find them valuable. Overall, people were not concerned that utilizing EAD would lead to enforcement action by the MDEQ against their company. Rather, people were seeking more "hands-on" assistance by EAD through on-site audits and personalized problem solving.
- The cost/benefit of environmental compliance is a significant issue with the management of manufacturing companies. Management needs to understand the benefits (which go beyond the legal requirements) before they are willing to invest in environmental activities. For example, if a choice had to be made between expending resources on environmental compliance versus health/safety compliance, focus group participants indicated that their facility management would choose to comply with the health and safety standards first (in most cases), and take the chance on getting caught with being out of environmental compliance.
- Customers were generally impressed and appreciative that the MDEQ was making an

effort to understand its customers and improve services.

THE CUSTOMER SURVEY

The return rate for the customer survey was 13% or 243 completed responses from a total of 1,800 mailed surveys. The results have a predictable margin of error of +/- 5%, but do not achieve a full sample confidence level of 90 or 95%, given the low percentage of returned surveys.

Demographics of Participants

- Fifty-one percent of the companies indicated that they were manufacturers, 10% were various service providers, 6% represented transportation and government, and 33% embodied other industrial sectors.
- Approximately 49% of the respondents worked in companies with 100 or more employees, 36% in companies with 20 to100 employees, and 14% in companies with fewer than 20 employees.
- Every region of the state was represented in the location of the respondents' companies. Thirty-one percent (75) of the respondents' companies were located in southeast Michigan, while 13% came from the emerging business corridor of Kent, Ottawa, and Muskegon counties. Twenty-three respondents were associated with national companies or with companies that had multiple locations throughout the state.
- About 24% of respondents said that their companies were less than 20 years old, 31% reported being 21-50 years old, and 23% were more than 50 years old.

Summary of Research Findings

Responses to the customer survey come from a wide range of expertise, experience, and responsibility for environmental and safety compliance within organizations. Each participant responded to the survey through their own filter of experience with and attitude toward the MDEQ and its EAD. With all of these differences, there were still some common themes that emerged from the survey and suggest the following conclusions:

- Most of the survey respondents (90%) had used the Guide, and overall they gave it good to excellent ratings. Of those who had not used the Guide yet 53% reported that they anticipated using it in the coming year. The majority (70%) of the respondents had obtained the Guide at the Regulations 101 workshop.
- The cost of the Guide was not an issue for 92% of survey participants. In this respect, survey respondents agreed with the participants of the focus group that the Guide was a reasonably priced resource.

- Concurring with the overall finding from the focus groups, 22% of survey respondents found the Guide to be most valuable as a quick reference covering a wide range of important topics. There was, however, a small (only 5% of respondents) but common thread throughout the survey of Guide users who sought to have more detail in the Guide about specific environmental program areas.
- Demonstrating its value, 88% of respondents reported keeping the Guide where users can easily access it (i.e. on desks as opposed to in files), and 65% of those surveyed said that they used the Guide on a monthly basis.
- Overall, users had few problems with the organization and content of the Guide, but appeared to prefer that the Guide be published in a binder format (53%).
- Most survey participants used the Guide to understand the requirements of a law, rule, code or standard. To a lesser extent, the Guide was also used as a resource to locate program information such as telephone numbers, web addresses, publications or to define an unfamiliar acronym.
- Very few people (31% of respondents) seem to have used the Facility Assessment Survey, located at the front of the Guide, to assist them in determining which parts of the book were applicable to their facility. Ninety-eight percent of those that did use the Assessment Survey, found it to be a very beneficial in guiding their use of the book.
- The most utilized portions of the Guide were:
  - Ch. 2: Waste Management in Section I (58% of users);
  - Ch. 13: Hazard Communication/Employee Right-to-Know in Section II, Part I (51% of users);
  - Ch. 23: Emergency Response in Section II, Part II (39% of users);
  - Ch. 32: Lockout/Tagout in Section II, Part III (41% of users);
  - Ch. 38: Local Fire Department in Section III (14% of users);
  - Appendix A: Acronyms (37% of users); and
  - Appendix C: Federal and State Laws and Rules (37% of users).
- Many of the respondents companies (59%) had implemented some type of pollution prevention program. Of the 144 respondents that had:
  - Thirteen percent had employed a variety of best management practices at their facility;
  - Seven percent had initiated some type of process review or process change that allowed for a substitution, minimization or a reduction of input or output materials
  - Almost 16% indicated that they were implementing a voluntary initiative such as the MDEQs C3 or MBP3 programs, an EMS, or had used the MDEQ RETAP program; and
  - Close to 15% had instituted a recycling or reuse program at their facility.
- Most respondents had an unexpected optimistic outlook when it came to the assessment of Michigan's environmental regulations: Sixty-three percent believed that environmental regulations are important to Michigan's quality of life, while 19% subscribed to the point of view that environmental regulations in Michigan are enforced unevenly. This

sentiment is similar to statements made by some focus group participants regarding the variance in enforcement application. Only a small number of respondents (3%) indicated that environmental regulations in Michigan are enforced too vigorously.

Donna Davis, MI DEQ

An Evaluation of Work Product and Program Effectiveness of the "Michigan Manufacturers' Guide to Environmental Safety and Health" and the Michigan (Small Business) Clean Air Assistance Program

Questions and Answers

Q: How long did it take to put the Guide together?
A: Over a year. This process included hard work with Michigan's OSHA and another state agency, despite the fact they had a pretty good idea of what each wanted in the guidebook.
Q: Did they mail the survey out at the same time as the Guide?
A: No, the Guides were distributed first, and then the list of Guidebook owners was used to send the survey out at a later date.
Q: What was the cost of focus groups in comparison to the Guidebook production? It seems that the focus groups were really helpful.
A: It is hard to ascertain the cost of developing the Guidebook over a year of work. Compared to man-hours, the actual cost of production was very small.
Q: Did you keep track of who owned the Guidebook? Did you notify those owners for whom a new regulation would really affect it?
A: Yes, we did keep track of Guidebook owners. The Guidebook is on the web by chapter, and they do not currently notify specific owners of changes to regulations. But, there is a commitment by the department to provide some level of "updates" in the odd years in which the Guidebook is not officially revised by way of a newsletter distribution to all Guidebook owners.
Q: Couldn't you do a facility audit to see if the Guidebook really affected their compliance rates?
A: Yes, a facility audit could have been completed to actually determine if the Guide made a significant difference in the compliance rate of the Guidebook owner's facility. Given the restriction in the amount of funding granted for this project, the department was unable to include such activities under its original grant proposal. However, they did ask the people who were surveyed where they might have changed their behavior. This was done through the voluntary completion of a standard question on the Guidebook's workshop evaluation form, completed by participants at the end of each workshop session.
Q: Couldn't you compare the inspection data to those who own the Guidebooks?
A: Yes, this could be done (i.e. by working in conjunction with the state's enforcement staff), but those who own the Guidebooks are not necessarily the ones who are usually inspected. This would require taking the project to a different level by initiating a special enforcement project that would examine the actual before and after compliance of a sample of Guidebook owners.

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Measuring Compliance Assistance Outcomes in New York State

Dan DeMicco
New York Department of Environmental Conservation

NYS Department of Environmental Conservation
P2 Unit, Division of Environmental Permits

OECA Grant: "Measuring Compliance Assistance Outcomes in New York State:" Project Summary

The P2 Unit has completed in some areas, and in other areas is in the process of, designing and implementing output and outcome measures and a supporting information system for two P2 Unit activity areas: the Compliance Assistance/P2 Workshops and Manuals and the M2P2 Program. For each activity area, the P2 Unit has or is in the process of (1) developing and using information collection instruments, procedures, and techniques, 2) collecting, recording, quality assuring/quality controlling (QA/QC), and validating information, 3) analyzing, aggregating, and summarizing collected information and 4) reporting results and making information generally accessible. More specifically, the following activities have been, or are being, carried out for this grant:

Compliance/P2 Technical Assistance Workshop and Manuals Analysis

Output/outcome measures have been developed for the P2 Unit's compliance and technical assistance workshops. Between 15 and 20 workshops are conducted by the P2 unit each year to educate clients in selected industrial sectors and to distribute sector-specific compliance and technical assistance manuals that are developed by the P2 Unit. The P2 Unit provides workshop attendees with an Evaluation Form it has designed which has been filled at the end of a workshop and which asks the attendee questions about the workshop. Results have been tabulated, summarized, and analyzed. A 6-Month Followup Survey form and a 12-Month Followup Survey form (following the date of the workshop) have been designed and distributed to (1) find out if the manual was useful, (2) ask for Manual improvement suggestions, (3) determine if any additional improvement initiatives have been identified, (4) discover if any improvement initiatives are planned or being implemented, and (5) obtain information on actual/ projected environmental or financial outcomes.

M2P2 Program Analysis

The Department's M2P2 Program is an integrated inspection program, in which teams of DEC regional staff from different media programs work together at one point in time to conduct a comprehensive compliance and P2 assessment at a regulated facility. So far almost 200 facilities have participated in this program.

The P2 Unit is in the process of conducting a set of general database analyses and site-specific analyses of these facilities. The general analyses consists of a series of computer assisted "correlational" analyses using the BRS/TRI data systems and addressing (1) M2P2 facilities vs non-M2P2 Facilities' waste/chemical generation/release changes that have occurred since 1993, when the M2P2 Program began and (2) waste/chemical generation/release changes subsequent to facility M2P2 inspections and issuance of the Inspection Reports. These results will be used to summarize changes in organizational knowledge and behavior at facilities, cost impacts of the changes, and to quantify waste generation and chemical release changes that can be attributed to the M2P2 Program.

Planned facility-specific analyses will use follow-up survey forms to (1) document clients' awareness/ understanding, behavior, environmental, and financial outcomes, (2) demonstrate (at least partial) causal links between the M2P2 Program and the above outcomes, and (3) compare environmental outcomes reported by the survey for consistency with amounts reported in the BRS/TRI database.

Presentation at the 1st Annual EPA-OECA Grant Conference
Washington, DC, April 15-16, 2003

NYS Department of Environmental Conservation
P2 Unit, Division of Environmental Permits

OECA Grant: "Measuring Compliance Assistance Outcomes in New York State:" Notes on Some Preliminary Findings and Results, including Unresolved Issues

A. Introduction/Overview

- three activity areas - Workshops/Manuals, M2P2 Program*, P2 Unit Metrics Listing*

- will talk only about first two areas, except to say that our *Listing* is derived from, and consistent with, NEWMOA's *Metrics Menu* (which we worked on as part of a NEWMOA states workgroup)

- as much as possible, project has been trying to measure all areas of EPA metrics continuum - client awareness/understanding, behavioral change, financial impact, and environmental impact

B. Workshops/Manuals

1. Overview, Goals, Methodology, Hypotheses, Assumptions

- the unit runs15-20 workshops each year, traditionally have used evaluation forms which focused mostly on evaluating the workshop, not outcomes

- used Evaluation Form to measure effects of *workshop* and a 6 month and 12 month Follow-up Form to measure effects of the *manuals* (usually two of these - compliance and P2)

- for both workshops and manuals:
  - a number of questions were asked on an ordinal scale, e.g.,"As a result of the workshop my knowledge of P2 increased:" - 5 choices, ranging from "A Lot" ("5") through "A Little"("1")
  - other questions were "Yes" and "No" - e.g., "Do you plan to assess any company practices for environmental improvement opportunities?"
  - open-ended questions - "Any examples of possible projects?

- hypotheses:
  - workshop (and manuals) will significantly (by *x* amount) increase knowledge/ understanding of compliance and of P2

- workshop (and manuals) should stimulate *x* number of new client environmental improvement projects

2. Preliminary Findings, Results and Outcomes to Date
   - workshops and manuals increase knowledge and appear to stimulate attendees to assess practices and do projects
   - as an example, five Marina workshops held from 12/02 through 2/03 had 88 attendees,
     - 70% and 68% of whom said that their knowledge of, respectively, regulations and P2 increased significantly, and
     - 58 (66% of the total) indicated that they will recommend that company practices be reviewed for improvement opportunities (for more details, see Attachment A)
   - 6-Month Followup Surveys and 12-Month have provided us with information about projects undertaken is response to the manuals and workshops - the 12-Month Marina survey, above, updated two projects first reported in the 6-Month and two additional projects

3. Unresolved Issues, Problems, Opportunities, Lessons Learned

   - major fall off of number of responses from Evaluation Form (at the workshop) to 6-Month and then 12-Month Followup Surveys, e.g., Hospitals started out with 56, then 11, and finally 4 responders
   - these are done as mail surveys - we thought of doing by phone, but this might be problematic because Followups are minimally three pages long and certain information, e.g., project information, might take time to find and calculate
   - could do a followup phone call or combination mail and phone - any suggestions?
   - problem with Followups - if the sample size is too small, the data may not be representative, but is it still be usable?

   - avoided direct questions about attendee compliance status - only asked if level of knowledge about the regulations increased - yet we want to know about this

   - to encourage attendees to fill out the Evaluation Form:
     - kept it only one page long
     - at the last break (*not* the end) asked attendees to do *and* provide time for them to do it

   - in Followup Forms establish base-line by asking attendee what knowledge level was before the manuals and how much this increased - we will also add the baseline question to the Evaluation Form (we decided *not* to do pre-test)

4. Transferability to Others

   - reporting instruments (survey forms) and spreadsheet/database, if minimally

altered, would be of use to others, especially as we refine them in use

C. M2P2 Program

1. Overview, Goals, Methodology, Hypotheses, Assumptions

- the M2P2 Program is DEC's "integrated," multi-media inspection program in which a multi-program (Air, Water, Solid/Hazardous Waste, Environ Remediation) team led by a DEC "facility manager" performs a comprehensive inspection, at one point in time, of a regulated facility - this should be more efficient for DEC and the facility
- each year new facilities are chosen - over 10 years, almost 200 facilities have participated in this initiative.
- the intention was that the inspections contribute to meeting the overall program goals, below

- goals of the M2P2 Program:
  - contribute to 50% reduction over 10 year (with 1990 as the baseline) of BRS (RCRA) hazardous waste generation and TRI releases
  - avoid (non-beneficial) inter-media waste transfers - especially those which are inadvertent or non-intentional which has happened with traditional uncoordinated media-specific permitting and inspection
  - provide facilities with awareness and understanding of P2 concepts and techniques to encourage them to undertake P2 (and other environmental) improvements

- information sources/datasets utilized:
  - DEC's M2P2 Facility Summary Forms and M2P2 Inspection Reports, and
  - DEC's BRS databases, EPA's TRI databases; as well as EPA's Envirofacts, TRI, OTIS, and ECHO databases

- hypotheses
  - M2P2 Facilities will have more reduction of BRS and/or TRI than non-M2P2 facilities - especially in the three years after the inspection
  - M2P2 Facilities will have more environmental management improvements than non-M2P2 facilities (future test)

- suite of Analytical Procedures (APs) (generally, in sequence in which they were done/planned)

(1) Construction of the M2P2 Facility Database (all M2P2 Facilities)
- linking facility with the (one or more) TRI and/or BRS IDs through time to create a master database for subsequent analyses

(2) General Analysis (all facilities)
- this is a "course grain" correlational analysis comparing all facilities that had a M2P2

inspection sometime between 1993 and 1998, with all those that did not

(3) Inspection Date-Focused Analyses (all qualifying facilities)
- look at trend data for one year before the inspection, the inspection year, & for three years after the inspection (the *year after* the inspection had been chosen for the fulcrum of the analysis because it is assumed that on average *at least* one year delay after the inspection before an improvement is implemented and that it impacts BRS and TRI amounts)
- compare to non-M2P2 facilities as a whole and (in the future) to a Control Group sample (see below)

- selected Individual Facilities BRS/TRI Profiles (sample of facilities)
  - graph out the BRS and TRI trend data to help determine if more rapid fall off (or less dramatic increase) of BRS and TRI amounts at M2P2 vs non-M2P2 facilities - for an example, see two graphics of TRI trend data for 1995 M2P2 Facility inspections (Attachment B)

(4) Facility Survey Form/Planned Site Visits (sample of facilities)
- designed the form to create a comprehensive profile focused on the inspection date - collects information from DEC staff/records *and* especially from the facility
- form would first be populated with all relevant information from DEC and the facility, especially focusing on other factors influencing facility changes in the year (and year after) of the inspection (multiple causality evaluation)
- decided (at least at this time) to defer the site visits and do AP 5, below

(5) Controlled Comparison (two samples of facilities)
- establishment of (non-M2P2) Control Group to match M2P2 sample
  - consists of set of paired comparisons, i.e., each group should have the same number of facilities which share the same number of attributes for the *year of the inspection*, e.g., at that time, they would have been in:
    - the 400/95 listing (i.e., they have large BRS or TRI volumes);
    - the BRS and/or TRI, but not the 400/95 (i.e., they are small);
    - the early (1993-95) or middle (1996-98) period of the program
    - the same sector (SEC Code)
    - the Hazardous Waste Reduction Program;
    - an enforcement action (with a completed consent order)
- comparison of AP 4 and AP 3 samples to their respective control groups

2. <u>Preliminary Findings, Results and Outcomes to Date</u>

- AP 1 is done - needed to do all subsequent analyses some difficulty in determining correct ID numbers through time
- all other APs are in process
- shortage of easily accessible *and readily usable (automated) data* from agency information systems makes data retrieval and use very cost-inefficient to do metrics (and other activities)

3. Unresolved Issues, Problems, Opportunities, Lessons Learned

- AP 2 is too "course grained," easy to do, but counts all M2P2 facilities the same regardless of when the inspection took place - masks the possible impact
- AP 3 compares all M2P2 inspected in a year to all facilities - change to all non-M2P2 facilities - even doing this still is not ideal - probably will switch to comparison with a control group (AP 6) used the State of Florida's "BRState Data Entry...," a Foxpro-based set of query templates, which greatly facilitated these iterative BRS data retrievals
- AP 4 is labor and time intensive (including collecting info from DEC and Facility), but information is from those who are closest to activities being measured and can provide explanations - collecting survey information from a number of sources requires methodology to reconcile differences - a representative sample of the facility universe to be measured needs to be selected
- AP 5 requires matching representative sample to be selected

- comparison of information from different APs
  - existing Facility Summary Forms (for multiple years) and Inspection Reports have specific information about facility environmental improvements, which can help explain specific reasons why BRS and TRI database amounts change - they also have information about non-BRS and -TRI chemical changes, and other changes in knowledge, behavior, and costs, and environmental impact

  - multiple causality can be controlled for at the database level by matching AP 5 Control groups to AP 4 and AP 3 procedures or at the facility level by conducting AP 4 facility surveys ("front-end control")

  - planned facility survey should provide outcomes in all areas and help to capture and attribute extent of influences if there are one or more causal influences influencing facilities at the same time as the M2P2 inspection ("back-end control")

4. Transferability to Others

- lessons learned from the AP 1 - construction of Master Database would be helpful for any analysis of a subset of facility metrics

- individual APs once completed, and when individual APs are compared and reconciled to one another, may provide useful guidance to others as to the comparative cost-benefit of each AP and as compared to one another

D. Summary and Next Steps

- we were doing metrics for Workshops and the M2P2 Program back in the middle 1990s

(although they were not as focused on outcomes, or as comprehensive as are current efforts) - we will continue to do them after this grant is completed

- the grant effort, especially in the Workshop area (which is a more discrete, easire measured activity than the M2P2 Program) has already produced useful results, even from administrative metrics, e.g., the NYS Water Association was very pleased to be informed that it was its newsletter that got most attendees to a workshop series and it helps us to better target our outreach announcements

- need to develop efficient and robust methodologies to minimize the cost and increase the ease of use, usefulness, and timeliness of metrics

- the Unit, as part of the Division of Environmental Permits, is looking toward piloting a program similar to the State of Massachusetts' Environmental Results Program - in this program a single self-audit replaces multiple media-specific permits - members of the sector are required to report their status against a set of sector-specific performance indicators - this is an exciting leap forward, from the metrics point of view, because the front-end of the system (planning) through the back-end (evaluation) metrics are an integral component of the entire system - as a result, regulated facilities are reporting on an periodic basis relevant and standardized metrics whose accuracy, they have a real stake in ensuring

  - *and* these metrics can be used on a periodic basis for the regulatory agency *as well as the facilities* to measure a facility's status and progress against other facilities - facilities themselves may be interested in competing with others in this area, especially if competitive advantage can be acquired from doing so

- especially in a time of ever increasing resource shortages, there is a need more than ever before for agencies to use metrics so that their limited resources can quickly be redirected and aligned to provide more efficient and effective services

- we believe that measurement/reporting enhancement efforts, such as this project funded by an OECA grant, is helping us develop this increasingly critical capability

- Dan DeMicco, P2 Unit

Evaluation Summary

Industry Sector: Marina

Workshop Dates: 1/8/2003 in Erie County; 12/5/2002 in Lake Champlain; 12/18/2002 in Long Island; 02/04/2003 in Staten Island; 01/14/2003 in Ontario County

Response to Workshops (N=88)						
Value of workshop for my job	**High**		**Medium**		**Low**	**Average**
	5	**4**	**3**	**2**	**1**	
	n=33	n=37	n=15	n=1	n=1	4.1
My knowledge of pollution prevention increased	**A lot**		**Somewhat**		**A Little**	**Average**
	5	**4**	**3**	**2**	**1**	
	n=20	n=38	n=24	n=3	n=0	3.9
Workshop length was	**Too Short**		**Just Right**		**Too Long**	**Average**
	5	**4**	**3**	**2**	**1**	
	n=0	n=1	n=64	n=17	n=4	2.7
OVERALL evaluation of workshop	**Excellent**		**Good**		**Poor**	**Average**
	5	**4**	**3**	**2**	**1**	
	n=28	n=35	n=20	n=4	n=0	4.0

Topics	Most Useful	Least Useful
Pollution Prevention at NYS Marinas	9% (n=13)	.0 (0%)
BMP's for Marinas	18% (n=24)	.0 (0%)
Storm Water Control Measures	9% (n=12)	2% (n=1)
Spills at Marinas	11% (n=15)	15% (n=7)
Pollution Prevention and Marine Habitat	12% (n=16)	4% (n=2)

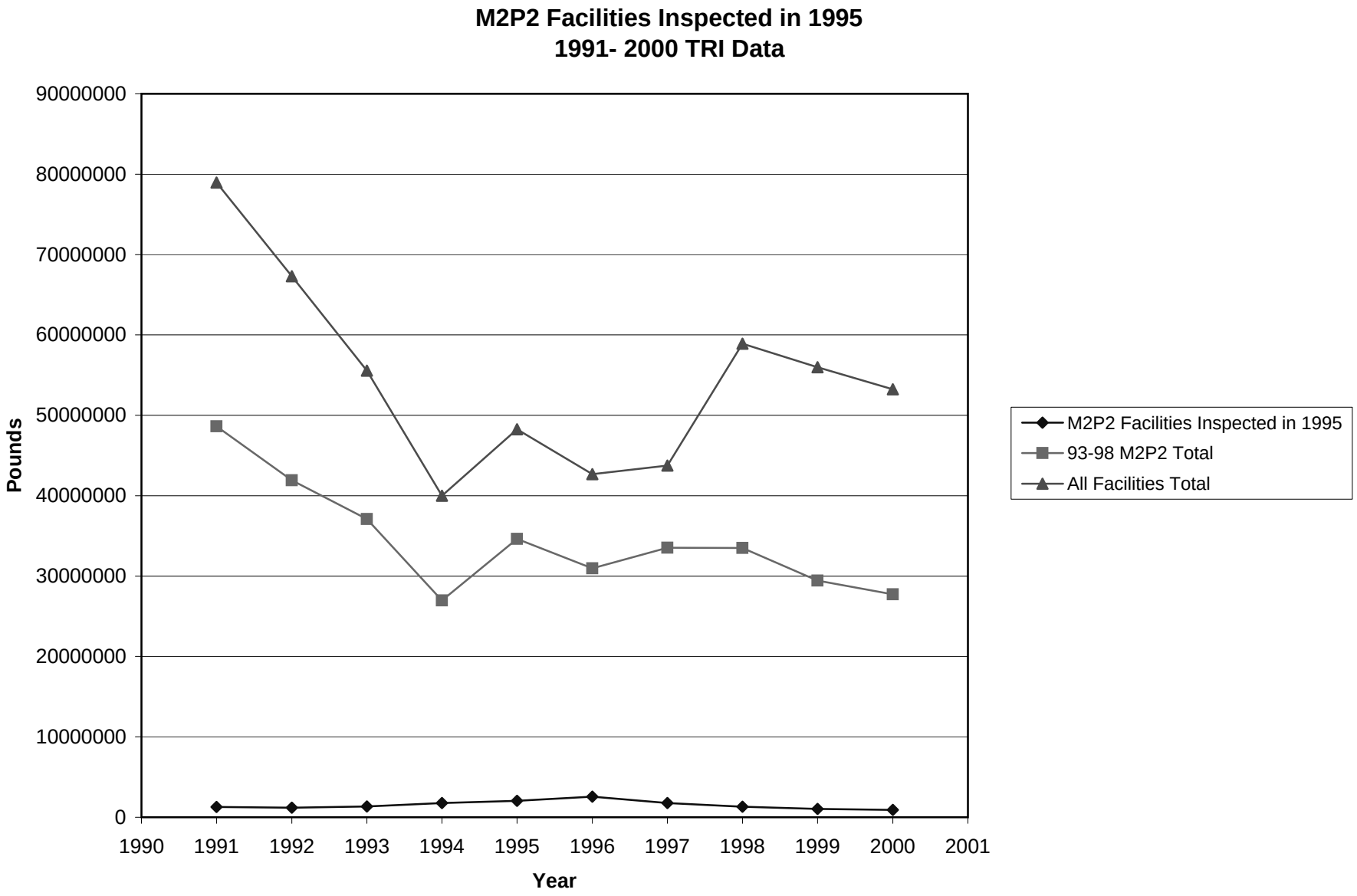
Topics	Most Useful	Least Useful
Permits: Protection of waters, wetlands, SPDES	7% (n=10)	11% (n=5)
Pesticide certification and Regulatory Update	13% (n=18)	21% (n=10)
Chemical storage, Handling and Disposal	12% (n=17)	28% (n=13)
Other	9% (n=12)	19% (n=9)

Based on workshop information, do you plan to suggest that any company practice(s) be reviewed for improvement opportunities?

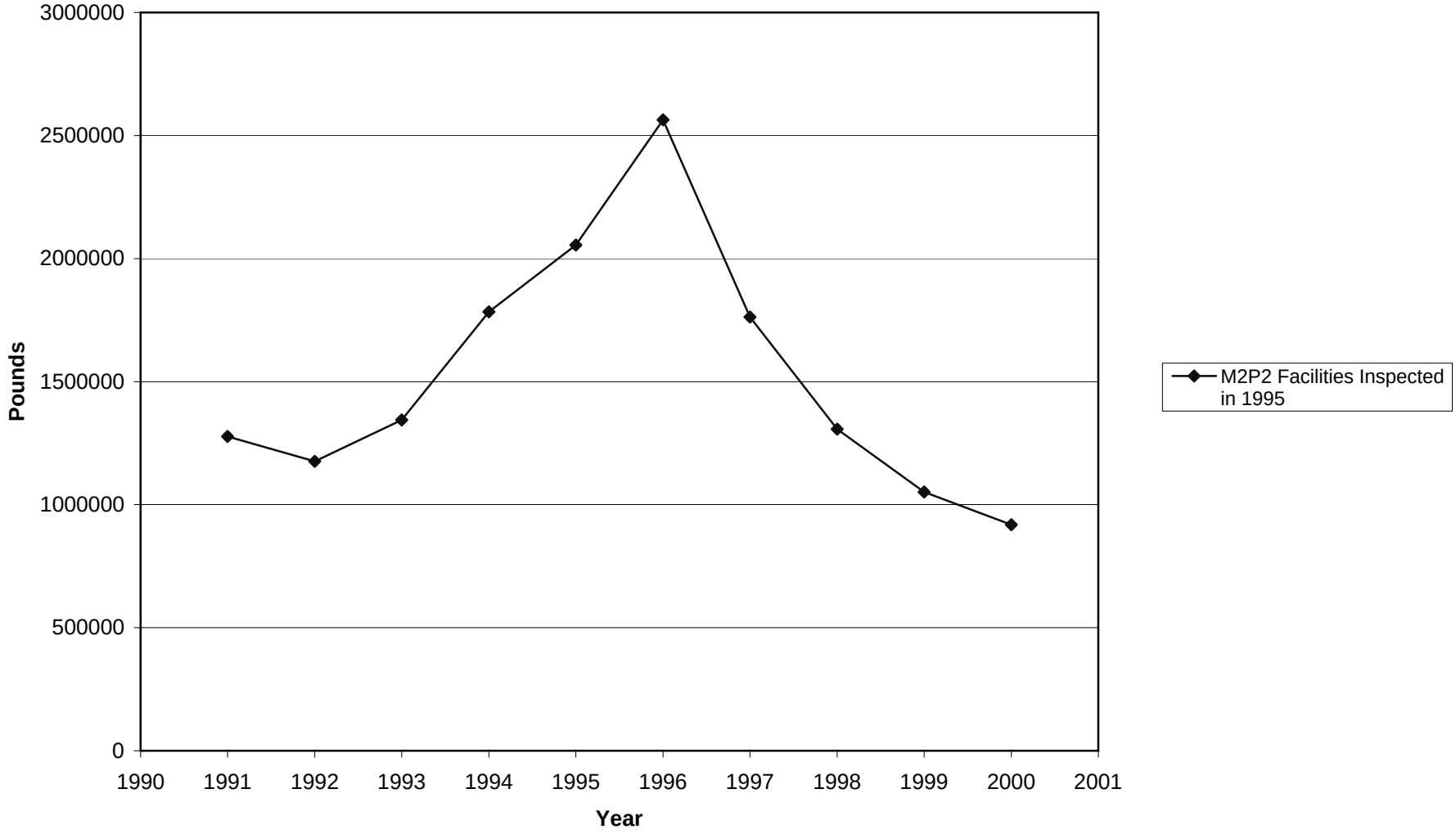
Yes	66% (n=58)
No	16% (n=14)
Don't know	8% (n=7)
Blank	10% (n=9)

I heard about the workshop from:

Newspaper	5.5% (n=5)
Mail Flyer	30% (n=27)
DEC Staff	18% (n=16)
DEC Web site	6.6% (n=6)
Trade Organization	24% (n=22)
Other	16% (n=15)


M2P2 Facilities Inspected in 1995
1991- 2000 TRI Data
90000000
80000000
70000000
60000000
50000000
40000000
30000000
20000000
10000000
0
Pounds
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
Year
M2P2 Facilities Inspected in 1995
93-98 M2P2 Total
All Facilities Total

M2P2 Facilities Inspected in 1995
1991- 2000 TRI Data



Dan DeMicco, NY DEC
"Measuring Compliance Assistance Outcomes in New York State"

Questions and Answers

Q: On the graph of pounds, is this pounds *emitted*? Has it been normalized for economy drops and other factors?

A: In answer to the first question, the pounds on the graph refer to TRI on-site direct releases from the facility to the environment. In answer to the second question, no, we'd also have to normalize the entire database - all fields. But what are we comparing the M2P2 facility data to? We are comparing it to non-normalized production figures for the entire state so for it to be meaningful we have to normalize all the data, which would be a significant effort.

Q: Have you thought about using a test instead of a subjective analysis?

A: We've thought about it. The problem with pre-tests is that the questions need to be very precise, in order to be good indicators of what constitutes the core concepts and information, which the attendees need to acquire. We felt it was easiest to do it the way we did, and just ask what the attendees knew before and after the workshop or reading the manual.

The Park Heights Project

Bernie Penner
Maryland Department of the Environment

Maryland Department of the Environment: The Park Heights Project

The Park Heights initiative is a voluntary participation project based on a new model for environmental regulation called "Environmental Problem Solving" (ERP). The project focuses on small auto body and automobile repairs businesses in what could be called an "environmental justice" community. In this context, the ERP approach to regulation, advocates collaborative relationships among regulators, regulated facilities, and the residential community in which those facilities are located. The project is intended to achieve measurable environmental results. These results will benefit the environment, the community, the businesses and the regulatory agencies. The government's role is to provide assistance to the regulated facilities' effort to comply with the law and simultaneously improve and monitor environmental conditions within the communities. The community in this project is intricately engaged in planning and implementing all aspects of the initiative. Mr. Penner will discuss the background of the project, the overall design, and its current status.

Bernie Penner, MDE

Park Heights Project

- Presented by Bernard Penner MDE Office of Enforcement & Compliance
- bpenner@mde.state.md.us

Notes

Park Heights Project

- Statistics: Compliance Rate
- Effectiveness of Compliance Assistance
- Improve Quality of Life

Notes

Background

- The Park Heights community in Baltimore City, Maryland is a largely low-income and minority community that has long been in need of redevelopment and revitalization

Notes

- *Park Heights can be considered an Environmental Justice (EJ) neighborhood.*

Background

- Park Heights is an area of concentrated commercial auto body shop activities
- The community expressed concern that the auto body and auto repair shops were sources of environmental pollution that adversely impacted community health

Notes

- *There are a disproportionate number of auto body shops in this neighborhood, which concerned community members.*

Partners

- The project represents a cooperative partnership between EPA Region III, Office of Enforcement, Compliance and Environmental Justice (OECEJ), the EPA Office of Enforcement and Compliance Assurance (OECA), the Maryland Department of the Environment (MDE) and the residents of Park Heights, who all identified the auto body shops and auto repair shops as an issue of concern as these minor sources constitute a potential major environmental problem in the Park Heights area

Notes

- *This project had to pull together many different layers of bureaucracy, including the community and EPA*

EPA's Expectations

- EPA's Office of Enforcement & Compliance Assurance (OECA) provided $275,000 in funding for this project
  - Activities funded include:

    1. Planning and Design of the Compliance Rate Analysis Project

    2. Generation of a compliance assistance workbook and self certification form for auto body and auto repair shop owners

    3. Development of a multimedia checklist for the two rounds of compliance inspections at the shops

Notes

EPA's Expectations

4. Hiring of community members to locate and identify the auto body and auto repair shops and facilitate distribution of compliance assistance material and training in the Park Heights Community

5. Statistical analysis of the two rounds of random inspection data, and the assessment of changes in compliance rate at the respective shops

Notes

METHOD

- Identify Universe
- Create Metric (EBPI)
- Baseline Inspections
- Compliance Assistance
- Final Inspections

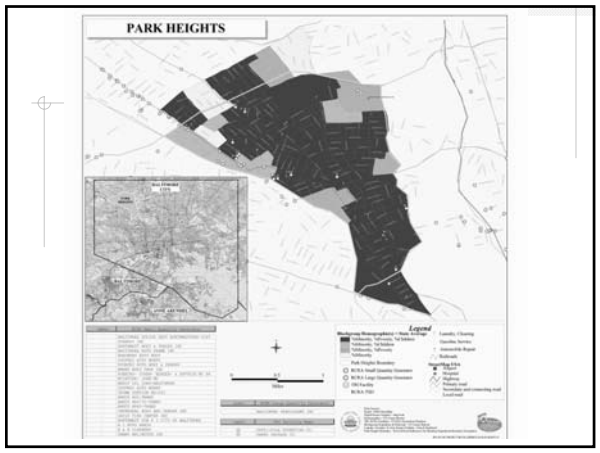
Notes

- *MD DEP wrote the definition of those shops they have jurisdiction over, put it in plain English, and then the community members went out and identified the entities of concern. The community members geo-coded it, also.*

Identify Universe

- The community identified and located the auto body and auto repair facilities in Park Heights using Global Positioning Systems (GPS). Using this data MDE created Global Information System (GIS) maps to track the development of the project, help communicate the scope of the project and possibly provide insights into the environmental impact of non-compliant facilities on the community.

Notes



Notes

- *The map is hard to see, but the insert is Baltimore city.*
- *The larger map is a map of the neighborhood they were concerned with, color-coded according to its demographics.*

Identify Universe

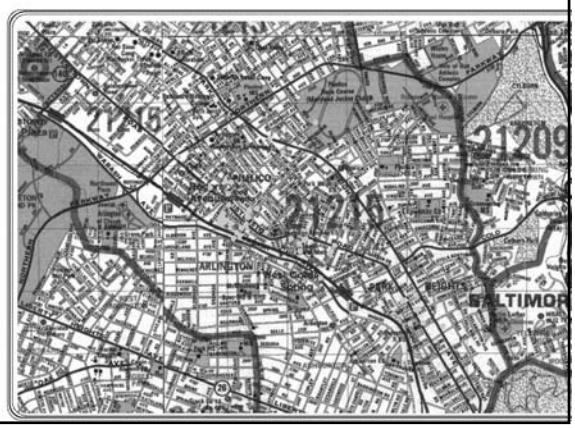
- EPA's databases initially identified a possible 150 facilities in the area. MDE only had 20 under permit.
- USEPA, MDE and the citizens identified over 50 auto body and/or auto repair shops currently operating in the neighborhood

Notes

Identify Universe

- Many of these small businesses were not captured on either MDE's or EPA's permitted/regulated facilities databases.
- MDE and EPA Region III's Office of Compliance, Enforcement and Environmental Justice (OECEJ) are working together with the community to address the problems auto body shops present in this community through an integrated strategy.

Notes



Notes

- *This map shows little blue spots that are the 53 facilities of concern.*
- *Initially, there was a significant difference in the number of facilities that each organization believed to be the universe: EPA (150), Maryland (20) and the community (53).*
- *They had to create a checklist before the could do inspections for consistency.*

E.B.P.I.s

Air Compliance	Air Knowledge	Air Best Practices
Waste Compliance	Waste Knowledge	Waste Best Practices
Water Compliance	Water Knowledge	Water Best Practices

Notes

- *The EBPIs are for air, water and waste compliance.*
- *If you're at the far right of this matrix, you're going beyond the call of duty. The middle is determining the level of the facility's knowledge. Many may not even know they need a permit.*
- *If the facility sends in a self-certification form, they do not enforce against them. They are committed to working with them.*

Inspections

- Inspections were conducted at a statistically valid number of randomly selected facilities in order to obtain a compliance rate.
- USEPA Region III inspectors completed over 40 inspections in July, 2002. Approximately the same amount of inspections will occur in October 2003.

Notes

- *They had inspectors available from MD EPA*
- *In order to create statistically valid measures, the inspectors needed to ask all the same questions; so they created a checklist.*
- *Their goal was to identify those entities that are out of compliance, those that are using best practices, and those that have increased their knowledge of both.*
- *The inspector, along with the community member that initially did the identification and geo-coding inspected 40 auto body shops in July 2002*

Compliance Assistance

- MDE will provide compliance assistance and pollution prevention outreach to the entire universe of auto body shops in Park Heights between the two periods of inspection (July 2002 & October 2003).
- Shops are encouraged to submit an environmental self certification form that discloses their present practices. In exchange for honest self-disclosure shops are not subject to enforcement actions.

Notes

- *Their project was volunteer - auto body shops did not have to participate, but they induced them to by telling them DEP would not take an enforcement action against them if they sent in a self-certification form admitting to a violation*
- *Once they did this, MDE made a commitment to work with those facilities until the end of the compliance assistance phase (end of September 2003) to create a compliance plan.*
- *If they have submitted a compliance plan by September 2003 but have not come into compliance as of that time, MDE will stay enforcement action for a reasonable period so they can complete their plan.*

Compliance Assistance

- The statistical goal of the project is to measure the effectiveness of the compliance assistance effort.
- The compliance assistance goal is to provide information, education and technical support that will promote a positive change in the behavior of operators in this sector.
- Analyzing the results of the follow up round of random inspections in October 2003, the project will be evaluated using Environmental Business Practice Indicators (EBPIs) to see if there was any improvement in the shops' environmental performance.

Notes

- *They also found that there are not as many underground containers, but there are many above-ground containers.*

Progress to Date

(Beginning of Compliance Assistance Phase)

- Workbooks and Self-certification forms reviewed by four shop operators
- Workbooks printed and distributed to all shops in identified universe
- Kick off meeting to be held in early May
- Training schedule flexible to meet the needs identified in the returned self certifications

Notes

- *Books are being distributed now*
- *The statistical goal of this project is to test the benefits of the book*
- *The community members are the ones distributing the book, and there is a certificate of receipt so they know who is receiving it.*
- *Training will be designed based on the information they get from the self-certification forms.*

BENEFITS

- Improve Compliance
- Improve Communications
- Improve Regulatory Process

Notes

- *Benefits have been slow. They are now getting more refined about doing things and showing results.*
- *In areas where the inspector was not familiar, they followed the checklist the most diligently; in areas where they were familiar with the requirements, they added too much detail and inserted conflicting information, which made the data entry more difficult.*

Questions and Answers

- *Q: Can you describe how the amnesty program works?*
- *A: We already have an environmental audit policy. Our amnesty is really agency discretion based on that policy. If we find something and you take action to fix it, we will not take enforcement actions. We will exercise our discretion at the end of the compliance period, at the end of September 2003*

Questions and Answers

- *Q: Michigan has an environmental audit plan that says as long as it's not a violation of a state requirements. How do you handle that?*
- *A: There aren't any federal requirements in this workbook. So it's not really amnesty, it's selective use of enforcement actions.*
- *Q: How did you get EPA to commit its inspectors?*
- *A: Environmental compliance and environmental justice is under one office with one manager so there was one person who had the authority to commit those resources - this was essential for the project.*

Questions and Answers

- *Q: Did the participation of community groups handing out workbooks make it more palatable, or not?*
- *A: Not sure I can say because we're not done yet. And we are paying the community groups, and they are going to get the shops to come to them, a form of community arm twisting. They can even get a prize. It was great to have someone in the neighborhood helping show each of the inspectors around and introduce them to shop owners, it really opened up the inspections. We are also doing a quality of life survey on aesthetics, sanitation, property value, and health of the community.*

Questions and Answers

- *Q: I noticed that everyone has a minimum number of facilities to get a good sample size, but everyone seems to have a different number.*
- *A: It has to do, in part, with the size of your universe. Our universe shrunk, so it cannot be extrapolated to a larger scale. A statistician would probably take issue with it.*
- *Q: We all need to be on the same page with this.*
- *A: EPA is aware of this. OPEI has put out a document on EBPI projects and related statistics. It has to do with homogeneity of population, etc. It only affects the confidence coefficient, not the results.*